



PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#8

PATENT APPLICATION OF:

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JOHN IRVEN and
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SERIAL NO. 09/641,933

FILED: AUGUST 18, 2000

FOR: SUB-ATMOSPHERIC GAS
DELIVERY METHOD AND
APPARATUS

GROUP ART UNIT: 3753

EXAMINER: G. WALTON

*Acknowledged
6/30/02*

CERTIFICATE OF MAILING

I hereby certify that this
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on this date:

January 8, 2002

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicants submit herewith a copy of each of the following thirty-six (36)
references cited for consideration in connection with the above application.

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<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
2,502,588	Preston et al.	04/1950
2,608,971	Holmes	09/1952
2,666,297	Skousgaard	01/1954
3,095,890	Cousteau et al.	07/1963
4,061,483	Burg	12/1977
4,198,854	Washington et al.	04/1980
4,487,334	Werding	12/1984
4,497,339	Gruner et al.	02/1985
4,583,372	Egan et al.	04/1986
4,640,221	Barbee et al.	02/1987
4,709,575	Myers	12/1987
4,723,967	Tom	02/1988
4,738,693	Tom	04/1988
4,754,897	Brace	07/1988
4,917,136	Ohmi et al.	04/1990
5,071,453	Hradek et al.	12/1991
5,156,827	Tom et al.	10/1992
5,341,968	Vandonick	08/1994
5,392,815	Stuart	02/1995
5,601,107	Moore et al.	02/1997
5,819,782	Itafuji	10/1998
5,820,102	Borland	10/1998
6,101,816	Wang et al.	08/2000
6,186,177	Maher	02/2001
6,210,482	Kitayama et al.	04/2001
6,216,739	Fukushima et al.	04/2001

<u>Foreign Document No.</u>	<u>Country</u>	<u>Publication Date</u>
743011	01/1956	Great Britain
1215303	12/1970	Great Britain
1430213	03/1976	Great Britain
250347	09/1986	Czechoslovakia
0 512 553	11/1992	Europe
WO 00/79159	06/2000	PCT
WO 00/67089	11/2000	PCT

<u>Publication</u>	<u>Author</u>	<u>Publication Date</u>
"Minimising System contamination potential from gas handling", <i>Semiconductor International</i> , pp. 98-104	George et al.	July, 1993
"Design and Operation of UHP Low Vapor Pressure and Reactive Gas Delivery Systems", <i>Semiconductor International</i> , pp. 138-143	Fine et al.	October, 1995
"Safe Usage of C1F3: Supply, vacuum service, and exhaust gas management", <i>Solid State Technology</i> , Vol. 40, Issue 9,	Pierce et al.	September, 1997

Applicants also submit herewith a copy of each of the following one hundred and ten (110) references cited for consideration in connection with the above application. These references are the results of a search done by a third-party search firm.

<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
1,916,635	Pepper	07/1933
2,091,051	Mesinger	08/1937
2,105,864	Saunders	01/1938
2,322,468	Redrup	06/1943
2,499,527	Raymond	03/1950
2,509,078	Stover	05/1950
2,517,534	Courtot	08/1950
2,623,331	Greening	12/1952
2,645,884	Kellie	07/1953
2,654,976	Jørgensen	10/1953

<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
2,675,793	Ziege	04/1954
2,693,823	Sogge	11/1954
2,765,983	Mayo	10/1956
2,854,991	Webster	10/1958
2,861,587	Hursen	11/1958
2,918,930	Jansen	12/1959
2,925,987	Priesmeyer	02/1960
3,083,721	Matthews et al.	04/1963
3,137,308	Machlanski et al.	06/1964
3,212,525	Henderson	10/1965
3,214,134	Noakes	10/1965
3,245,583	Miller et al.	04/1966
3,276,470	Griffing	10/1966
3,319,649	Cummins	05/1967
3,566,913	Parthe, Jr.	03/1971
3,709,242	Chase	01/1973
3,720,222	Andrews et al.	03/1973
3,746,036	Du Bois et al.	07/1973
3,756,271	Grogono et al.	09/1973
3,766,933	Nicholson, Jr.	10/1973
3,776,267	Alley	12/1973
3,787,023	Shufflebarger et al.	01/1974
3,797,803	Goto et al.	03/1974
3,811,467	Jones	05/1974
3,845,876	Needham et al.	11/1974
3,939,872	Wentworth, Jr.	02/1976
3,955,794	Hankosky	05/1976
3,982,559	Ochs	09/1976
4,004,608	Kish	01/1977
4,040,445	McCormick	08/1977
4,044,737	Nishimura	08/1977
4,044,739	Miura et al.	08/1977
4,070,001	Musgrove	01/1978
4,108,197	Brakebill	08/1978
4,120,480	Ando et al.	10/1978
4,166,607	Webb	09/1979
4,167,198	Kotyza et al.	09/1979

<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
4,201,366	Danko et al.	05/1980
4,211,387	Getchell et al.	07/1980
4,228,777	Haase	10/1980
4,232,695	Roberge	11/1980
4,237,920	Norman	12/1980
4,287,909	Tompson	09/1981
4,335,742	Jacyno	06/1982
4,348,005	Eaton et al.	09/1982
4,434,778	Morita et al.	03/1984
4,508,132	Mayfield, Jr. et al.	04/1985
4,526,341	Thomas	07/1985
4,537,385	Bragg et al.	08/1985
4,556,193	Yoshiga	12/1985
4,634,099	Danko et al.	01/1987
4,659,061	Scheffel	04/1987
4,687,017	Danko et al.	08/1987
4,706,929	Kalaskie et al.	11/1987
4,763,690	Martin	08/1988
4,815,699	Mueller	03/1989
4,828,219	Ohmi et al.	05/1989
4,844,111	Pritchard et al.	07/1989
4,846,440	Carlson et al.	07/1989
5,056,759	Schlesch	10/1991
5,086,801	Peacock et al.	02/1992
5,117,797	Telep et al.	06/1992
5,131,627	Kolenc	07/1992
5,165,655	Drexel et al.	11/1992
5,209,253	Taylor	05/1993
5,217,043	Novakovi	06/1993
5,238,016	Eidsmore	08/1993
5,238,024	Taylor	08/1993
5,263,477	Crome	11/1993
5,297,578	Scott et al.	03/1994
5,305,791	Kowalchuk	04/1994
5,329,966	Fenimore et al.	07/1994
5,337,790	Heritier-Best et al.	08/1994
5,390,697	Muschelknautz	02/1995

<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
5,398,725	Nakazawa et al.	03/1995
5,421,366	Naffziger et al.	06/1995
5,443,090	Ligh	08/1995
5,452,738	Borland et al.	09/1995
5,553,635	Gregoire	09/1996
5,597,009	Scherrer et al.	01/1997
5,634,627	Daido et al.	06/1997
5,651,528	Frei et al.	07/1997
5,673,897	Crochet et al.	10/1997
5,678,803	Shinohara et al.	10/1997
5,749,227	Smith et al.	05/1998
5,755,255	Iwabuchi	05/1998
5,755,364	LeCoffre et al.	05/1998
5,845,675	Ligh	12/1998
5,890,876	Suito et al.	04/1999
5,895,376	Schwartz et al.	04/1999
5,909,747	Scheiber	06/1999
5,913,505	Ouvrard	06/1999
5,915,410	Zajac	06/1999
5,941,506	Smith et al.	08/1999
5,964,446	Walton et al.	10/1999
6,000,419	Bernhard	12/1999
6,003,535	Ollivier	12/1999
6,007,609	Semerdjian et al.	12/1999

<u>Foreign Document No.</u>	<u>Country</u>	<u>Publication Date</u>
57-207913	Japan	12/1982
61-266884	Japan	11/1986

The search firm provided the following comments regarding the above one hundred and ten (110) references:

U.S. Patent No. 2,091,051 shows a balanced valve comprising a diaphragm D, and bellows 60, inlet port 10, outlet port 11. See Figures 1-2, page 1, column 2, lines 12-50.

U.S. Patent No. 2,517,534 shows a pressure regulator including a diaphragm D. See Figures 1-3, column 1, lines 35-55, column 2, lines 1-51.

U.S. Patent No. 2,645,884 shows a pressure regulating valve comprising flexible bellows 13, sealing disk 40. See Figures 1-4, column 3, lines 57-75, column 4, lines 1-75, column 5, lines 1-18.

U.S. Patent No. 3,212,525 shows valves for refrigeration apparatus having cooling and/or heating cycles, including bellows 25, and capillary tube 27. See Figures 1-6.

U.S. Patent No. 3,245,583 shows a gas container 20, having a protecting tube 30, wherein the intake end 36 of the tube 30 is placed within a central part of the high pressure gas container. See Figure 1, column 2, lines 46-66.

U.S. Patent No. 4,335,742 shows an evaporator pressure regulator including capillary tube 92, bellow assembly 72. See Figures 1, 2, and 5.

The remaining references are of general interest for showing different fail safe and valve arrangements.

Additionally, Applicants submit herewith a copy of each of the following forty-one (41) references cited for consideration in connection with the above application. These references are also the results of a search done by a third-party search firm.

<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
255,338	Salomon	03/1882
788,352	Crawford	04/1905
1,042,745	Zahm	10/1912
1,731,519	Bastian	10/1929
1,837,233	Rumpff	12/1931

<u>U.S. Patent No.</u>	<u>Inventor(s)</u>	<u>Issue Date</u>
2,057,150	Kehl et al.	10/1936
2,237,052	Gill	04/1941
2,357,777	White	09/1944
2,750,071	Ritchie	06/1956
3,650,290	Moen et al.	03/1972
3,827,246	Moen et al.	03/1974
4,128,391	Braunstein	12/1978
4,349,136	Fallon et al.	09/1982
4,376,376	Gregory	03/1983
4,431,117	Genbauffe et al.	02/1984
4,484,695	Fallon et al.	11/1984
4,520,838	Fisher et al.	06/1985
4,583,372	Egan et al.	04/1986
4,606,195	Winkler	08/1986
4,756,310	Bitterly	07/1988
4,821,907	Castles et al.	04/1989
4,844,111	Pritchard et al.	07/1989
4,905,723	Pritchard et al.	03/1990
4,909,269	Pritchard et al.	03/1990
5,255,525	Wieland et al.	10/1993
5,271,232	Ogawa et al.	12/1993
5,357,758	Andonian	10/1994
5,438,837	Caldwell et al.	08/1995
5,442,927	Germain	08/1995
5,456,281	Teay	10/1995
5,544,785	Frigiere	08/1996
5,740,833	Olds et al.	04/1998
5,755,254	Carter et al.	05/1998
5,761,910	Tom	06/1998
5,836,351	Underwood, III	11/1998
5,916,245	Tom	06/1999
5,935,305	Tom et al.	08/1999
5,996,617	Olds et al.	12/1999

<u>Foreign Document No.</u>	<u>Country</u>	<u>Publication Date</u>
2 045 414	United Kingdom	10/1980
WO 94/17334	PCT	08/1994
0 470 009	Europe	02/1995

The search firm provided the following comments regarding the above forty-one (41) references:

U.S. Patent Number 5,544,785 shows a reservoir of gaseous fuel in liquid phase comprising a draw off orifice (6), valve (7) and a pressure reducer or evaporator (8). See Figure 1, Col. 2, lines 60-67, Col. 3, lines 1-30.

U.S. Patent Number 2,237,052 shows a dispensing and mixing apparatus for liquefied gas comprising filler valve (34), vapor outlet valve (36) and pressure regulator (30). See Figure 1, Col. 2, lines 1-30.

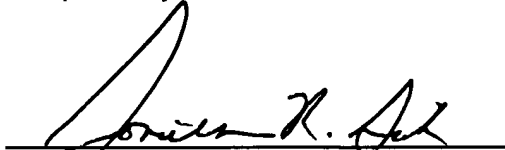
The remaining references are of general interest for showing different fluid storage and dispensing systems.

All of the above references are listed on the enclosed Form PTO-1449 (6 pages) entitled "Information Disclosure Citation."

This Supplemental Information Disclosure Statement is being submitted before the receipt of a Final Action under §1.113 or a Notice of Allowance under §1.311, and is accompanied by an authorization to charge the fee set forth in §1.17(p), currently \$180.00.

Please charge any and all fees incurred in connection with this submission
to Deposit Account No. 13-0017 in the name of McAndrews, Held & Malloy, Ltd.

Respectfully submitted,


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